<u>Abstract</u>

A smart alarm system determines when fire, carbon monoxide, or both are present in a specific area and responds accordingly. If fire is detected, alarms are activated, emergency services are notified, and ventilation, namely vents and fans, is cut off in the specific area where the hazard is detected. If carbon monoxide is detected, alarms are activated, emergency services are notified, and ventilation is increased by opening vents and activating exhaust fans to dissipate the gas from the area containing the gas. In the event both are detected, the system will keep the ventilation cut off to prevent the spread of fire.